

## 0208732885 MARSH CREEK NEAR NEW HOPE, NC

LOCATION.--Lat 35°49'01", long 78°35'35", Wake County, Hydrologic Unit 03020201, at right upstream wingwall, on bridge at Stoneybrook Road, 0.2 mi downstream of U.S. Highway 401, and 2.9 mi southwest of New Hope.

DRAINAGE AREA.--6.84 mi<sup>2</sup>

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1984 to current year.

REVISED RECORDS.--WDR NC-95-1: 1995(M).

GAGE.--Water-stage recorder. Datum of gage is 196.63 ft above NGVD of 1929. Satellite and telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Maximum discharge for period of record from rating curve extension above 1,300 ft<sup>3</sup>/s, on basis of indirect measurement of peak flow. No flow also occurred Aug. 5, 1999. Minimum discharge for current water year also occurred Oct. 3, 4, 5, 6.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003  
DAILY MEAN VALUES

| DAY  | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 1.4  | 4.9  | 2.6  | 42   | 7.1  | 16   | 6.6  | 4.9  | 8.5  | 7.4  | 12   | 10   |
| 2    | 1.3  | 3.7  | 2.6  | 9.9  | 4.8  | 44   | 5.6  | 4.5  | 4.5  | 86   | 13   | 4.1  |
| 3    | 1.3  | 2.8  | 2.6  | 16   | 4.1  | 10   | 5.0  | 4.0  | 3.9  | 17   | 6.6  | 3.2  |
| 4    | 1.3  | 3.4  | 5.8  | 7.5  | 12   | 7.1  | 4.7  | 4.0  | 6.0  | 6.8  | 3.9  | 17   |
| 5    | 1.3  | 13   | 115  | 5.0  | 6.1  | 15   | 11   | 7.0  | 3.9  | 5.1  | 56   | 9.2  |
| 6    | 1.3  | 60   | 18   | 4.4  | 16   | 101  | 6.3  | 12   | 3.3  | 4.1  | 16   | 3.7  |
| 7    | 1.5  | 7.2  | 9.9  | 3.9  | 62   | 12   | 55   | 5.7  | 64   | 3.6  | 5.5  | 3.1  |
| 8    | 1.6  | 4.2  | 6.1  | 3.9  | 9.7  | 7.2  | 20   | 4.5  | 37   | 3.1  | 275  | 17   |
| 9    | 1.6  | 3.0  | 4.5  | 3.6  | 6.1  | 5.7  | 91   | 3.9  | 7.2  | 4.3  | 22   | 5.9  |
| 10   | 12   | 2.7  | 4.0  | 3.5  | 26   | 4.8  | 130  | 3.8  | 4.5  | 4.6  | 21   | 3.4  |
| 11   | 523  | 16   | 26   | 3.2  | 9.5  | 4.4  | 23   | 3.7  | 3.8  | 4.1  | 9.5  | 2.9  |
| 12   | 20   | 80   | 8.9  | 3.1  | 6.1  | 4.3  | 11   | 3.2  | 10   | 4.4  | 5.6  | 2.6  |
| 13   | 6.4  | 56   | 93   | 3.1  | 4.8  | 9.4  | 7.6  | 2.9  | 5.1  | 3.3  | 4.1  | 2.9  |
| 14   | 8.6  | 9.0  | 21   | 3.1  | 4.6  | 10   | 6.3  | 2.8  | 3.5  | 35   | 4.4  | 2.3  |
| 15   | 7.7  | 4.9  | 7.8  | 3.0  | 8.5  | 4.9  | 5.7  | 8.0  | 42   | 6.7  | 4.5  | 2.1  |
| 16   | 31   | 9.4  | 5.5  | 3.3  | 8.7  | 50   | 5.3  | 8.8  | 40   | 9.8  | 47   | 1.9  |
| 17   | 6.4  | 47   | 4.6  | 5.3  | 9.7  | 9.6  | 4.9  | 4.4  | 24   | 13   | 58   | 1.9  |
| 18   | 3.8  | 17   | 4.0  | 3.8  | 34   | 6.4  | 4.7  | 7.6  | 9.0  | 6.6  | 19   | 70   |
| 19   | 2.7  | 6.5  | 5.2  | 3.4  | 15   | 5.4  | 5.9  | 28   | 71   | 11   | 7.0  | 23   |
| 20   | 2.3  | 4.7  | 31   | 3.4  | 9.4  | 224  | 4.8  | 6.3  | 69   | 4.4  | 4.6  | 4.8  |
| 21   | 51   | 4.0  | 8.8  | 3.1  | 7.4  | 23   | 4.8  | 4.6  | 15   | 3.5  | 3.7  | 3.4  |
| 22   | 36   | 3.3  | 5.3  | 3.7  | 126  | 11   | 11   | 77   | 7.0  | 2.7  | 20   | 15   |
| 23   | 7.2  | 2.8  | 4.1  | 4.1  | 24   | 7.8  | 5.1  | 29   | 5.5  | 2.7  | 8.0  | 24   |
| 24   | 4.4  | 2.8  | 40   | 3.4  | 8.7  | 6.2  | 4.5  | 7.9  | 4.5  | 2.9  | 4.1  | 5.2  |
| 25   | 3.3  | 2.8  | 34   | 3.1  | 6.1  | 5.7  | 27   | 14   | 3.9  | 2.4  | 3.3  | 3.4  |
| 26   | 2.8  | 2.7  | 9.0  | 3.5  | 7.6  | 5.4  | 129  | 7.0  | 3.6  | 2.1  | 2.9  | 3.0  |
| 27   | 2.3  | 2.6  | 5.6  | 3.6  | 112  | 4.9  | 29   | 5.4  | 3.3  | 2.1  | 2.7  | 2.7  |
| 28   | 38   | 2.5  | 4.6  | 3.3  | 36   | 5.2  | 8.4  | 4.5  | 8.1  | 1.9  | 2.4  | 2.9  |
| 29   | 41   | 2.6  | 4.1  | 4.0  | ---  | 8.9  | 6.5  | 12   | 10   | 8.5  | 2.3  | 2.2  |
| 30   | 44   | 2.6  | 3.8  | 47   | ---  | 34   | 5.3  | 7.4  | 12   | 10   | 2.2  | 2.0  |
| 31   | 8.2  | ---  | 5.0  | 21   | ---  | 11   | ---  | 13   | ---  | 15   | 33   | ---  |
| MEAN | 28.2 | 12.8 | 16.2 | 7.55 | 21.1 | 21.8 | 21.5 | 10.1 | 16.4 | 9.49 | 21.9 | 8.49 |
| MAX  | 523  | 80   | 115  | 47   | 126  | 224  | 130  | 77   | 71   | 86   | 275  | 70   |
| MIN  | 1.3  | 2.5  | 2.6  | 3.0  | 4.1  | 4.3  | 4.5  | 2.8  | 3.3  | 1.9  | 2.2  | 1.9  |
| IN.  | 4.76 | 2.09 | 2.73 | 1.27 | 3.22 | 3.67 | 3.51 | 1.70 | 2.68 | 1.60 | 3.69 | 1.39 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2003, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 8.03   | 7.63   | 7.16   | 12.3   | 11.5   | 14.4   | 9.94   | 8.17   | 8.68   | 9.07   | 10.5   | 12.3   |
| MAX  | 28.2   | 15.7   | 16.2   | 30.3   | 22.0   | 31.9   | 21.5   | 25.9   | 20.3   | 25.0   | 38.0   | 67.4   |
| (WY) | (2003) | (1996) | (2003) | (1998) | (1998) | (1998) | (2003) | (1984) | (1989) | (1997) | (1986) | (1999) |
| MIN  | 1.39   | 1.72   | 2.02   | 3.62   | 2.77   | 4.54   | 2.08   | 2.05   | 1.29   | 2.44   | 2.07   | 1.86   |
| (WY) | (2001) | (1992) | (1995) | (2001) | (1991) | (1986) | (1986) | (2002) | (1993) | (1987) | (1993) | (1990) |

| SUMMARY STATISTICS       |       |        | FOR 2002 CALENDAR YEAR |        |        | FOR 2003 WATER YEAR |        |     | WATER YEARS 1984 - 2003 |  |  |
|--------------------------|-------|--------|------------------------|--------|--------|---------------------|--------|-----|-------------------------|--|--|
| ANNUAL MEAN              |       |        | 12.3                   |        |        | 16.3                |        |     | 10.0                    |  |  |
| HIGHEST ANNUAL MEAN      |       |        |                        |        |        |                     |        |     | 16.3                    |  |  |
| LOWEST ANNUAL MEAN       |       |        |                        |        |        |                     |        |     | 5.87                    |  |  |
| HIGHEST DAILY MEAN       | 523   | Oct 11 |                        | 523    | Oct 11 |                     | 890    | Sep | 6, 1996                 |  |  |
| LOWEST DAILY MEAN        | 0.41  | Jul 9  |                        | 1.3    | Oct 2  |                     | 0.00   | Aug | 3, 1999                 |  |  |
| ANNUAL SEVEN-DAY MINIMUM | 0.49  | Jun 12 |                        | 1.3    | Oct 1  |                     | 0.05   | Aug | 1, 1999                 |  |  |
| MAXIMUM PEAK FLOW        |       |        | 2,440                  | Oct 11 |        |                     | 3,900* | Sep | 6, 1996                 |  |  |
| MAXIMUM PEAK STAGE       |       |        | 11.83                  | Oct 11 |        |                     | 13.33  | Sep | 6, 1996                 |  |  |
| INSTANTANEOUS LOW FLOW   |       |        | 1.1*                   | Oct 2  |        |                     | 0.00*  | Aug | 3, 1999                 |  |  |
| ANNUAL RUNOFF (INCHES)   | 24.44 |        | 32.30                  |        |        |                     | 19.88  |     |                         |  |  |
| 10 PERCENT EXCEEDS       | 27    |        | 39                     |        |        |                     | 20     |     |                         |  |  |
| 50 PERCENT EXCEEDS       | 2.9   |        | 5.7                    |        |        |                     | 3.5    |     |                         |  |  |
| 90 PERCENT EXCEEDS       | 0.66  |        | 2.7                    |        |        |                     | 1.3    |     |                         |  |  |

\* See REMARKS.

NEUSE RIVER BASIN  
0208732885 MARSH CREEK NEAR NEW HOPE, NC—Continued